

Louisiana Office of Public Health Laboratories	
Test Name	Standard Plate Count
PHL Location	Amite/Shreveport Regional Labs
CPT Code	N/A
Synonyms	SPC, PAC
Brief Description of Test	Used for enumeration of bacteria colonies of a given sample in raw milk and finished (pasteurized) fluid milk products.
Possible Results	Number of colonies per ml or gm
Reference Range	Raw milk samples: <2500/ml ESPC to 100,000/ml for individual producers and <2500/ml ESPC to 300,000 for raw commingled milk. Finished fluid milk products: <250/ ml or gm ESPC to 20,000/ ml or gm
Specimen Type	Raw dairy milk and fluid finished milk products (cultured products are not tested by SPC)
Specimen Container(s):	Raw milk samples are collected in vials and submitted in sterile Whirl-Pak bags or sterile plastic vials normally used by industry. Finished fluid milk products are collected in the container in which they are sold at the retail outlet.
Minimum volume accepted:	Raw milk: at least 40 ml Finished fluid milk products: at least a half pint (when collecting at this volume two samples are required to insure enough volume for all testing)
Collection Instructions	Collect a representative sample according to established protocol. In using the sterile Whirl-Pak or sterile vial there must be at least 0.5 to 1.0 inch air space. If using the Whirl-Pak bag secure closure so that the tabs are not twisted together.
Storage and Transport Instructions	Samples must be stored on wet ice, the ice cannot cover the sample top and there must not be any water over the top of the sample at anytime. The sample must be transport in a timely manner so that testing can be performed prior to 60 hours of collection. Samples must be accompanied with a pilot sample of the same type and size for raw samples and at least ½ the size of the largest container for finished fluid products. The temperature pilot must be from 0.0-4.5C upon receipt.
Causes for Rejection	<ol style="list-style-type: none"> 1. Temperature of pilot samples out of acceptable range. 2. Time of receipt >60 hours from time of collection 3. Sample container unprotected or under ice or water when received. 4. Sample frozen 5. Temperature control missing

	6. Sample leakage 7. Unsatisfactory sample container 8. Insufficient sample quantity
Limitations of the Procedure	This procedure does not provide the source of a high bacteria count nor does it provide speciation of the bacteria.
Interfering Substances	The presence of any substance that interferes with bacteria count, i.e. disinfectants, chlorine, antibiotics
References	Standard Methods for the Examination of Dairy Products FDA 2400 Series for the Examination of Dairy Products US FDA/CFSAN Grade A Pasteurized Milk Ordinance Laboratory Milk and Dairy Products SOP Manual
Additional Information	A completed Lab 50 form must accompany the submission of samples. All information on the form must be completed and each sample identified per information on the form and the sample. A pilot must be submitted for each ice chest where there is multiple ice chests used. If there is a specific test for which the sample (s) are being submitted it must be noted on the form at submission time. All forms must include name of collector, date and time, temperature of milk when collected, producer or plant codes, size and type of finished product being submitted.
Release Date	11/2013
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